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EXAMINER	
SHRESTHA, BIJENDRA K	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/680,455	**Applicant(s)** WEST ET AL.	
	Examiner BIJENDRA K. SHRESTHA	**Art Unit** 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *01/14/2008*.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 1-17, as best understood, it appears that the claimed method steps could simply be performed by mental process alone and are not statutory. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr,* 450 U.S. 175, 184 (1981); *Parker* v. *Flook,* 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson,* 409 U.S. *63,* 70 (1972); *Cochrane* v. *Deener,* 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

As per 18-23, Claim 18 recite "a display interface comprising; a data structure…; a display grid… …..". A display (or user) interface not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. Here, Applicant has claimed a system defined merely by software or terms synonymous with software or files, namely "modules or interface", lacking storage on a medium, which enables any underlying functionality to occur. It is not clear whether instructions are in executable form and therefore there is no practical application. The system has no physical components or structure and is thus considered non-statutory.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-12 and 15-23 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Galant, U.S. Pub No. 2003/0182220 (reference A in attached PTO-892) in view of Mintz, U.S. Patent No. 6,305,007 (reference H in attached PTO-892).

5. As per claim 1, Galant teaches a method for displaying and controlling risk related information in an electronic trading environment, the method comprising:

creating a display interface comprising a data structure and at least one display grid (see Fig. 2B and Fig. 3B),

wherein the data structure comprises a plurality of data nodes associated with trader- related risk information being automatically updated based on fill information being received from at least one electronic exchange (see paragraph [0056]; Fig. 47), and

selecting data nodes in the data structure to be mapped to the at least one display grid (see Fig. 3 and 5; where selection of data node “Swap Spreads” in Fig. 3 displays grid in Fig. 5);

displaying trader-related risk information associated with the selected data nodes on the at least one display grid (see Fig. 24, Interest Rate Risk (712); Fig, 26, volatility).

wherein the trader-related risk information is displayed on the at least one display grid according to an arrangement of the data nodes in the data structure (see Fig. 18, paragraph [0094] and Fig. 20, [0096]; where top 10 top ten issues having largest losses for the day is displayed);

receiving a user input that selects a first data node from a first location in the data structure and moves the first data node to a second location in the data structure, wherein the data structure comprises a new arrangement of data nodes (see page 20, column 1, claim 1; where company specific data is moved to second location (Fig. 2B)); and

responsive to said user input (see Fig. 2B), updating the at least one display grid so that the trader- related risk information is displayed on the at least one display grid according to the new arrangement of data nodes in the data structure (see Fig. 4, paragraph [0071] and [0077]; where auto refresh tab automatically updates display in response to a user input).

Galant does not teach the data structure includes the ability to select and manipulate data nodes to different locations in the data structure.

Mintz teaches the data structure includes the ability to select and manipulate data nodes to different locations in the data structure (Mintz, column 2, lines 10-14; column 4, lines 20-49).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to incorporate the data structure includes the ability to select and manipulate data nodes to different locations in the data structure of Galant et al. because Mintz teaches incorporating above features enable to use data structures with an object-oriented program and single property page can manipulate data in applicable data structures saving cost and time (Mintz, column 1, lines 33-34; column 2, lines 12-14).

6. As per claim 2, Galant in view of Mintz teaches calim1 as described above . Galant further teaches a computer readable medium having stored therein instructions to execute the method of claim 1(see Fig. 1; paragraph [0011]).

7. As per claim 3, Galant in view of Mintz teaches claim 1 as described above. Galant further teaches the method wherein

the data structure is arranged in a tree-based data structure (see Fig. 13; paragraph [0010] and [0089]).

8. As per claim 4, Galant in view of Mintz teaches claim 3 as described above. Galant further teaches the method wherein

the data nodes in the tree-based data structure are arranged such that each higher ranked node is a sum of lower ranked sub- nodes (see paragraph [0012]).

9. As per claim 5, Galant in view of Mintz teaches claim 4 as described above. Galant further teaches the method wherein

the data nodes are grouped based on accounts being used by each trader such that each higher ranked node is a sum of a plurality of account sub-nodes corresponding to accounts of a plurality of traders (see Fig. 3; where data nodes are grouped Government, Corporate and Equity where, for example, higher ranked data node is sum of plurality of sub-nodes such as Portfolios, Current Spreads, Priority Issues and All New Issues; Examiner notes this analogy could be applied to multiple traders account).

10. As per claim 6, Galant in view of Mintz teaches claim 5 as described above. Galant further teaches the method wherein

each of the plurality of account sub-nodes is associated with at least one sub-node corresponding to a tradable object being traded under each respective account (see Fig. 3; where Government bonds/treasury bills, Corporate Securities and Equity are tradable objects under each respective accounts).

11. As per claim 7, Galant in view of Mintz teaches claim 4 as described above. Galant further teaches the method wherein

the data nodes are grouped based on an electronic exchange at which tradable objects are being traded such that the higher ranked node is a sum of a plurality of tradable object sub-nodes associated with at least one tradable object being traded at a predetermined electronic exchange (see Fig. 41).

12. As per claim 8, Galant in view of Mintz teaches claim 4 as described above. Galant further teaches the method wherein

the data nodes are grouped based on a currency in which tradable objects are being traded such that the higher ranked node is a sum of a plurality of tradable object sub-nodes associated with at least one tradable object being traded in a predetermined currency (see Fig. 6).

13. As per claim 9, Galant in view of Mintz teaches claim 1 as described above. Galant further teaches the method wherein

the selected data nodes are displayed on the at least one display grid based on a user-selectable display pattern (see Fig. 2B).

14. As per claim 10, Galant in view of Mintz teaches claim 1 as described above. Galant further teaches the method wherein

the at least one display grid comprises at least one two-dimensional grid (see Fig. 3).

15. As per claim 11, Galant in view of Mintz teaches claim 10 as described above. Galant further teaches the method wherein

the at least one data display grid comprises a plurality of cells arranged in a plurality of rows and columns (see Fig. 3).

16. As per claim 12, Galant in view of Mintz teaches claim 11 as described above. Galant further teaches the method comprising:

displaying data corresponding to higher ranked nodes in a plurality of cells corresponding to a selected column; and

displaying data corresponding to lower ranked node corresponding to each higher ranked node in respective rows corresponding to each higher ranked node (see Fig. 15).

17. As per claim 15, Galant in view of Mintz teaches claim 1 as described above. Galant further teaches the method wherein

the trader-related risk information comprises profit and loss (P/L) related information (see Fig. 3; Fig. 17-20;, PCT Gainers (128), PCT Losers(129), Net Gainers(130) and Net Losers(131)).

18. As per claim 16, Galant in view of Mintz teaches claim 15 as described above. Galant further teaches the method wherein

the P/L related information is selected from a group consisting of a current P/L value, a high P/L value, and a low P/L value during a predetermined time period (see Fig. 17-20; paragraph[0093-0096]).

19. As per claim 17, Galant in view of Mintz teaches claim 1 as described above. Galant further teaches the method wherein

the trader-related risk information comprises a net position (see Fig. 25 and 26; where call and put structures for bond is illustrated; Examiner notes that user have flexibility of displaying “net position” as described in Fig. 2B).

20. As per claim 18, Galant teaches a display interface for displaying trader related risk information, the display interface comprising:

a data structure comprising a plurality of data nodes associated with trader-related risk information being automatically updated based on fill information being received from at least one electronic exchange(see paragraph [0056]); and

at least one display grid comprising a plurality of cells, wherein the at least one display grid displays trader-related risk information corresponding to data nodes selected from the data structure (see Fig. 3; where trade related risk information include net losers and net gainers) and,

wherein the trader-related risk information is displayed on the at least one display grid according to an arrangement of the data nodes in the data structure (see Fig. 18, paragraph [0094] and Fig. 20, [0096]; where top 10 top ten issues having largest losses for the day is displayed),

wherein the data structure receives a user input that selects a first data node from a first location in the data structure and moves the first data node to a second location in the data structure, wherein the data structure comprises a new arrangement of data nodes (see page 20, column 1, claim 1; where company specific data is moved to second location (Fig. 2B)), and

responsive to said user input, the at least one display grid updates so that the trader-related risk information is displayed on the at least one display grid according to the new arrangement of data nodes in the data structure (see Fig. 4, paragraph [0071] and [0077]; where auto refresh tab automatically updates display in response to a user input).

Galant does not teach the data structure includes the ability to select and manipulate the plurality of data nodes to different locations in the data structure.

Mintz teaches the data structure includes the ability to select and manipulate the plurality of data nodes to different locations in the data structure (Mintz, column 2, lines 10-14; column 4, lines 20-49).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to incorporate the data structure includes the ability to select and manipulate the plurality of data nodes to different locations in the data structure of Galant et al. because Mintz teaches incorporating above features enable to use data structures with an object-oriented program and single property page can manipulate data in applicable data structures saving cost and time (Mintz, column 1, lines 33-34; column 2, lines 12-14).

21. As per claim 19, Galant in view of Mintz teaches claim 18 as described above. Galant further teaches the display interface wherein

the at least one display grid comprises a two-dimensional display grid (see Fig. 3).

22. As per claim 20, Galant in view of Mintz teaches claim 18 as described above. Galant further teaches the display interface wherein

the data nodes comprise a plurality of higher ranked nodes and a plurality of lower ranked sub-nodes, wherein each higher ranked node is a sum of lower ranked sub-nodes corresponding to the higher ranked node.

23. As per claim 21, Galant in view of Mintz teaches claim 18 as described above. Galant further teaches the display interface wherein

the higher ranked nodes are grouped based on accounts being used by each trader such that each higher ranked node is a sum of a plurality of lower ranked tradable object data nodes associated with a plurality of tradable objects being traded under each account (see Fig. 3; where data nodes are grouped as Government, Corporate and Equity where, for example, higher ranked data node is sum of plurality of sub-nodes such as Portfolios, Current Spreads, Priority Issues and All New Issues).

24. As per claim 22, Galant in view of Mintz teaches claim 18 as described above. Galant further teaches the display interface wherein

the higher ranked node is associated with a predetermined exchange, and the higher ranked node is associated with a plurality of sub-nodes corresponding to a plurality of tradable objects being traded at the predetermined exchange (see Fig. 41).

25. As per claim 23, Galant in view of Mintz teaches claim 18 as described above. Galant further teaches the display interface wherein

the higher ranked node is associated with a predetermined trader, and the higher ranked is associated with a plurality of sub-nodes corresponding to a plurality of tradable objects being traded by the trader (see Fig. 3; where data nodes are grouped Government, Corporate and Equity where, for example, higher ranked data node is sum of plurality of sub-nodes such as Portfolios, Current Spreads, Priority Issues and All New Issues; Examiner notes this analogy could be applied to multiple traders account).

26. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galant U.S. Pub No. 2003/0182220 (reference A in attached PTO-892) in view of Mintz, U.S. Patent No. 6,305,007 (reference B in attached PTO-892) further in view of Levy, U.S. Patent No. 5,673,028 (reference B in attached PTO-892).

27. As per claim 13, Galant in view of Mintz teaches claim 11 as described above. Galant further teaches the method comprising displaying financial information as desired by the user (see Fig. 2B).

Gallant does not teach changing an appearance of a cell upon detecting a triggering condition and the triggering condition is associated with data being displayed in the cell.

Levy teaches changing an appearance of a cell upon detecting a triggering condition and the triggering condition is associated with data being displayed in the cell Levy, Fig. 4 and 12; abstract).

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time the invention was made to allow changing an appearance of a cell upon detecting a triggering condition and the triggering condition is associated with data being displayed in the cell of Galant et al. because Levy teaches that testing circuitry continually, or periodically , monitor one or more parameters of electronic component and generates a signal when there is a deviation from certain stated conditions (Levy, column 8, lines 37-39).

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosures. The following are pertinent to current invention, though not relied upon:

Buist (U.S. Patent No. 6,408,282) teaches system and method for conducting securities transactions over a computer network.

Brumfield et al. (U.S. Pub No. 2004/0117292) teach system and method for trading and displaying market information in an electronic trading environment.

Defario (U.S. Pub No. 2002/0004774) teaches data analysis system for tracking financial trader history and profiling trading behavior.

Herbert et al. (U.S. Patent No. 7,075,552) teach system and method for display grid characterization, calibration and verification.

Khemlani et al. (U.S. Pub No. 2002/0049713) teach website for financial information.

Sarkar (U.S. Patent No. 6,012,067) teach method and apparatus for storing and manipulating objects in plurality of relational data managers on the web.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijendra K. Shrestha whose telephone number is (571) 270-1374. The examiner can normally be reached on 7:00AM-4:30 PM(Monday-Friday); 2nd Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Kalinowski/
Supervisory Patent Examiner, Art Unit 3691

BKS/3691